

DFS QUARTERLY

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Life Safety Achievement Award

Each year the Residential Fire Safety Institute recognizes fire departments that had zero deaths in structure fires in the previous calendar year. More than 1,200 awards were issued for 1999.

The cutoff date for award applications for the year 2000 has been extended until July 30, 2001.

To qualify for the award, the fire chief

must submit an application stating that the department's jurisdiction had zero structural fire deaths in the past calendar year, and must describe the department's fire prevention bureau or activities. For more information go to the Institute's web site at www.firesafehome.org/LSA.htm or call Dana Bies at the Institute at 763-416-0527 or, for an application, e-mail Dana Bies at rfsimgr@mn.mediaone.net. ♦

Secretary Perlov Honors S.A.F.E. Young Heroes Awards at State House Ceremony

On April 26, 2001, Public Safety Secretary Jane Perlov and State Fire Marshal Stephen D. Coan presented 24 awards to 32 "young heroes" of the Student Awareness of Fire Education or S.A.F.E. Program. These students have saved themselves or the life of a loved one with the lessons

learned through the S.A.F.E. Program.

Children as young as four years old from Bellingham, Brimfield, Cambridge, Chatham, Dighton, Eastham, Granby, Leominster, Mattapoisett, Mansfield, Middleborough, Millis,

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From the Desk of the Fire Marshal

Stephen D. Coan

As this fiscal year comes to an end we look towards the new one, we all are extremely aware of the deteriorating economy and the impact it will surely have on every state agency. While our commitment to our core mission remains the same, we will be forced to assess what levels of programs and service next year's extremely tight budget will support.

Hoax Bomb Law

This past month, law enforcement used the hoax bomb law for the first time, twice in one week. The hoax bomb law is a tool the hazardous devices technicians in the Office of the State Fire Marshal have requested for years and it's great that they finally have it. This law makes it a specific crime to perpetrate a hoax device and addresses the fact that previously, there had been no specific charge for this act. A hoax device causes the same fear and panic that a real one does. It must be treated as real until trained specialists can determine that it is not.

Fire Deaths Up in 2000

One of the great concerns is that civilian fire deaths increased in 2000 to 78. This was a big jump from the alltime record-low set in 1999 of 53 civilian deaths. The concern is that this high number of deaths should be a one-year statistical blip and not interrupt the continuation of the

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Photo: Jason Henske

From the Fire Marshal

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decade-long decline in fire deaths that Massachusetts has been experienced. One of the contributing factors in the increase in fire deaths was the number of fatal fires ignited by space heaters. The increasing cost of energy certainly contributed to the rise in fire deaths, and it does not look like energy costs are going to stop rising anytime soon.

Public Education Best Response

Public fire education is the best and most cost-effective method for reducing fire deaths. Our recent State House event honoring "young heroes" from the Student Awareness of Fire Education Program proves that public education works. I hope that every fire department will make an effort to educate all members of their community on fire safety. Our public education unit has a number of resources for fire departments: public service announcements on smoke alarms, free copies of the NFPA's *Remembering When* program for older adults, the S.A.F.E. Program, the partnership with the Department of Public Health to distribute free smoke alarms, the *Curriculum Planning Guidebook*, the resource library, flyers and factsheets, the Public Education Hotline and the upcoming conference.

Together, we can get back on track and continue to reduce the number of fire deaths in Massachusetts. ♦

NEAFC Fire/Rescue/EMS Expo and Conference

The New England Association of Fire Chiefs will be holding their 79th Annual Fire/Rescue/EMS Expo and Conference, the largest in New England, June 23-25, 2001 at the Eastern States Exposition, home of the "Big E", West Springfield, MA. Displays of over 350 exhibits of

equipment, apparatus and ambulances are expected. Admittance is \$5 and parking is free. For conference information contact Ret. Chief Richard Wehter, Sec./Trea. at 781/749-8626 and for exhibit information contact Ret. Chief Charles Maurais at 781/631-3086. ♦

Western Massachusetts Family Fire Safety Day Promotes the S.A.F.E. Program

On Sunday, June 24, 2001, in conjunction with the New England Fire Chief's Association Conference, the Western Massachusetts Family Fire Safety Day will be held at the "Big E" Fairgrounds in West Springfield. The all day affair will start at 11:00 a.m. right after the apparatus parade and run until 4:00 p.m. Public fire educators who participated last year had a great time meet-

ing and performing for the crowds interested in the fire service and public fire and life safety education.

If you and any other member of your department's S.A.F.E. Team are available to showcase your static or interactive displays and educational demonstrations, please contact Paul Whitney by phone at (978) 567-3388 or by e-mail at Paul.Whitney@state.ma.us. ♦



Changes to ESFR Sprinkler Standards

Factory Mutual Global has announced that it will be issuing a revised Data Sheet May 8-9, 2001 that will no longer permit the use of K-14 and K-16.8 (metric K-200 and K-240) early suppression fast response (ESFR) sprinklers for palletized storage up to 35 ft (10.7 m) under a ceiling/roof height of up to 45 ft (13.7 m), and will require one level of in-rack sprinklers to protect rack storage to those same heights. The change is being made based on consideration of an "offset ignition scenario" that was used by Underwriters Laboratories in evaluating the sprinklers, and which showed that excessive sprinklers could operate under specific arrangements at these protection limits.

Although UL never acknowledged a protection capability for the ESFR sprinklers for 35 feet of storage under a 45-foot roof, the 1999 edition of NFPA 13 included this allowance within Table 7-9.5.1.2 on the basis of the earlier FM approval. A proposal has been tentatively approved for the next (2002) edition of NFPA 13 that will eliminate this allowance.

The change is not being processed as a Tentative Interim Amendment and is therefore not being considered an emergency. However, specifiers and contractors should be aware of the pending limitations on the use of the K-14 and K-16.8 ESFR sprinklers. The UL listing of these sprinklers is unchanged by the Factory Mutual action, but it is possible that some Authorities Having Jurisdiction will interpret the basis on which UL lists the devices to preclude their use in the manner allowed by the 1999 edition of NFPA 13.

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Richard Skinner/Regional Manager,
NFSA Headquarters, 40 Jon Barrett
Road, Patterson, NY (845) 878 4200 x
116 ♦

Regulation Change on LP-Gas Cylinders Will Affect Consumers Next April

On April 2, 2002, Section 2-3.15 of NFPA 58-1998 will prohibit the refilling of any LP-gas container with a capacity of between 4 pounds and 40 pounds that is not equipped with an Overfill Prevention Device (OPD).

NFPA 58-1998 has been adopted by reference by the Board of Fire Prevention Regulations (527 CMR 6.07(1)). The only exceptions to this regulation are forklift truck cylinders and welding/cutting gas cylinders. All cylinders

manufactured or re-qualified after March 31, 1998 have been required to be OPD equipped.

A number of municipalities and LP-gas distributors already accept out of date cylinders for recycling, usually for a small fee.

If you have any questions, you may contact the Code Compliance & Enforcement Unit at (978) 567-3300 or in Western Massachusetts at (413) 587-3181. ♦

Licensing Exams

All licensing exams will be given at the Department of Fire Services, Stow campus, from 9 a.m. to 12 noon. The same exams are given on the same dates, at the same times at the western Massachusetts office of the Department of Fire Services, One Prince Street, Northampton.

Exam Date	Type of License
June 12, 2001 9:00 AM - 12:00 PM Room 109	Cannon/mortars, special effects and fireworks
July 9, 2001 9:00 AM - 12:00 PM Room 502	Fire extinguishers
July 10, 2001 9:00 AM - 12:00 PM Room 502	Blasting

The Office of the State Fire Marshal issues licenses to people and companies engaged in fireworks, blasting, explosives, cannon and mortar firing, special effects, special hazard systems and portable fire extinguishers. Information on applications and exam dates to obtain new licenses or to renew existing licenses may be obtained by contacting Joanne Melanson, at (978) 567-3700. Examinations for licenses are held quarterly. ♦

Campus Fire Safety Conference

The Department of Fire Services is sponsoring a day-long conference to benefit local fire departments, and college and university administrators who are responsible for fire safety. It may also be of interest to boarding school administrators. This program will be offered in central Massachusetts on Wednesday, August, 8, 2001 from 8:45 a.m. – 4:00 p.m. at the Worcester Polytechnic Institute Campus Center, 100 Institute Road, Worcester. The cost for this conference is \$10.00 per person. Fire departments may register through the Mass. Firefighting Academy (use the standard form; course #653) and college and university personnel may register by contacting Sally Wyrobek in the Northampton Office of the Department of Fire Services at (413) 587-3181. The registration deadline is August 1, 2001. ♦

Mass Decon Capabilities Every Fire Department Can Deploy

The combined threats from terrorism, school violence and industrial hazardous materials have brought about a renewed focus on hazardous materials incidents that contaminate large numbers of victims. While the Department of Fire Services', Hazardous Materials Response division has highly capable mass decontamination capabilities, the response time of this system, particularly when multiple units are needed, may not be sufficient to gain initial control of such an emergency.

To remedy the impact of these delays, the Hazmat division and Massachusetts Firefighting Academy have developed the Rapid Access Mass (RAM) Decon system. The intent of this program is to train every fire department in Massachusetts in the RAM Decon system so that such emergencies can be effectively controlled in any community.

Consider the following scenario: *At the annual Fourth of July celebration in your town, a small explosion occurs in the crowd. For several minutes after the initial detonation, witnesses describe the hissing of a compressed air release and the wide spraying of an unknown liquid. Upon arrival, dozens of spectators experience nausea, vomiting, profuse sweating and shortness of breath. Some are unconscious and others exhibit seizure activity. With each passing minute, more victims show symptoms and panic is setting in. It is evident that a chemical was disbursed.*

This scenario is not based upon the exotic and hard to obtain military nerve agents, but upon the dispersal of concentrated Malathion. Malathion is a commercially available insecticide. It is an organophosphate, weaker, but identical to effects of military nerve agents. You are faced with a realistic

chemical attack, multiple contaminated victims and concerns of cross contamination. What will you do?

Without an immediate and visible solution, victims will begin to leave the scene. As departing victims continue to receive dosages of the pesticide on their clothing and skin they will become

sicker, perhaps becoming involved in car accidents throughout the town. Those that find their way to the local hospital will contaminate the

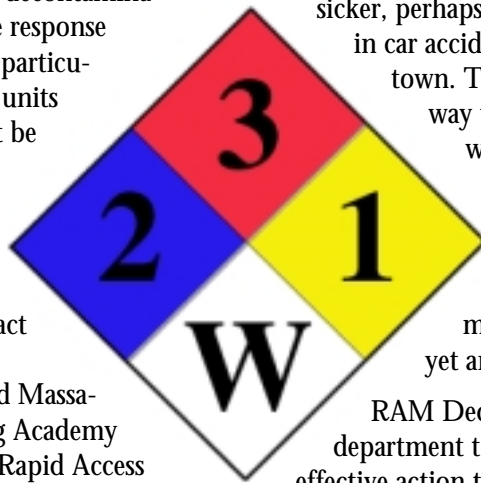
facility and its medical staff, rendering the facility useless and making it the site of yet another disaster.

RAM Decon allows your department to take immediate, effective action to reduce the number and severity of casualties, gain control of the incident by keeping contaminated victims on scene, and prevent cross contamination to responders and the community at large. RAM Decon can be deployed and operational using normal fire fighting equipment in less than ten minutes!

Faced with the scenario presented above, your local department can

respond by establishing one or multiple decontamination stations while awaiting the Hazmat and other additional resources needed to properly conclude the emergency. The system uses a combination of engine and ladder companies, but can be modified to operate with whatever you respond with, and requires fewer than ten people to operate. In essence, a high volume, low-pressure water shower is built providing 180-degree wash patterns and a quick processing time.

Training for RAM Decon is presently provided by the Massachusetts Firefighting Academy in a "hand-off" format requiring one member from each department attend a 4-hour program. Upon completion, the department trainer is provided a CD-ROM with a PowerPoint presentation, overhead transparencies, and student and instructors guides. Training at the department level can be conducted at company drills in only a couple of hours. Additional training programs are scheduled for delivery beginning in September of this year. Contact Martin Greene or Gerry McNamara of the academy's Hazardous Materials Training Program at (978) 567-3209 for course dates and locations. ♦



Automatic Defibrillator at DFS

Donna Romano, EMS Coordinator

The Department of Fire Services has an automatic defibrillator in service for use should an actual cardiac arrest occur. It is located in the first aid room on the first floor of the main building. Automatic defibrillators are now being installed in airports and other public areas, and have shown a dramatic increase in saving the lives of cardiac arrest victims.

Most of the consultant staff has been trained on the use of the defibrillator,

but we also have five full time employees who are willing to help out their co-workers in a time of need. I would like to send out kudos to Christina Gentilucci, Judy O'Brien, Julie Kilbride, Ruth Labonte, and Rebecca Healy for completing cardiopulmonary resuscitation (CPR) and advanced external defibrillation (AED) training for laypeople. I would like to see more people participate in this very important training. If you are interested in learning CPR and AED, please contact me at extension 3258. ♦

Candle Safety Awareness Project

Andrew Powell, member, Mass. Public Fire & Life Safety Education Task Force

The ongoing project of promoting safe candle use throughout the Commonwealth has taken on some exciting directions. Under the direction of State Fire Marshal Coan, members of the *Massachusetts Public Fire and Life Safety Education Task Force* have begun to build bridges with major candle retailers not only in Massachusetts, but also across the country. Retailers such as Yankee Candle, Illuminations, and the National Candle Association have embraced the use of the *Candle Circle of Safety* logo in their stores as a way to better educate consumers on safe candle use.

Also, the National Candle Association has agreed to promote the safety logo



with candle manufacturers and wholesalers nationwide. The Marshal's office recently provided Pennsylvania State

University with the *Circle of Safety* logo to be used for on- and off-campus safety campaigns as well as to introduce a national association of university safety professionals with the logo. Members of the Task Force and the Public Education Unit in the Office of the State Fire Marshal encourage any comments or suggestions from public educators in the field to continue to make this project stronger and far reaching. We would like to thank Marshal Coan for his continued support for candle safety in the Commonwealth. As a reminder, this year's *Candle Safety Awareness Day* is December 10, 2001. ♦

First Use of New Hoax Bomb Law

On January 16, 2001 the Cellucci-Swift Administration signed into law the "hoax bomb bill", making it a specific crime to perpetrate a hoax bomb in the Commonwealth. This law was used by law enforcement officers for the first time in two separate cases in May.

The State Fire Marshal is responsible for investigating the cause of all fires and explosions in the commonwealth. He proposed this legislation at the request of the explosive technicians and investigators assigned to his office. It addresses the fact that previously there had been no specific charge for perpetrating a hoax bomb device that the investigators could bring.

"We are pleased that law enforcement has this tool to use because it will help cut down on these dangerous crimes," said Public Safety Secretary Jane Perlov. "Perpetrating a hoax device strikes as much fear as a real unexploded device and is just as cruel and disruptive."

On May 16, 2001, administrators at the South Shore Vocational Technical High School in Hanover notified authorities that they had found an electronic device that was rigged to look like a bomb with a note attached that said, "This is a bomb." A joint investigation by Hanover Police detectives and state police assigned to the Fire and Explosion Investigation Section in the Office of the State Fire Marshal led to the arrest of three students, a 16-year old and two 17-year olds. They were charged with possession of a hoax infernal machine, committing a bomb scare, conspiracy and disturbance of a school assembly.

In a separate incident on May 16, 2001, a 31-year old woman was arrested for malicious destruction of property and possession of a hoax infernal device. A laptop computer bag with wires, circuit boards and duct tape was found leaning against the front door of a Quincy company with a note. Investigators from the Quincy Police and Fire Departments, assisted by state police fire investigators and hazardous device

technicians assigned to the Office of the State Fire Marshal, quickly found the disgruntled former employee in a nearby mall. She was arrested and bail was set at \$10,000.

The penalty for violating this new law, MGL c 266 s102A 1/2, is imprisonment in a house of correction for two and one-half years, or in a state prison for five years and/or a fine of \$5,000.

"Every suspicious package, every potential device, must be treated like it is the real thing by emergency responders," said State Fire Marshal Stephen D. Coan. "Whether or not the threat to life and property is real, the fear and anxiety for the public is the same until our trained experts can determine that it is not," he added.

The Hazardous Devices Unit is a 9-member group of specially trained state police officers assigned to the Fire and Explosion Investigation Section in the Office of the State Fire Marshal, a division of the Department of Fire Services ♦

Recruit Class #143 Graduates

On May 4, 2001 Recruit class #143 graduated forty-three students from the Massachusetts Firefighting Academy's fifty-five day Recruit Firefighting Program. This rigorous professional training provides our newest firefighters with the basic skills to perform their jobs effectively and safely. The class included 40 men and three women, representing the fire departments of: Amherst, Andover, Bourne, Burlington, Canton, Franklin, Hanson, Holden, Hudson, Ludlow, Mansfield, Maynard, Northampton, Norwell, Plainville, Randolph, Revere, Salem, Scituate, Stoughton, Tewksbury, Wellesley, West Springfield, and Weymouth. The class president was Judy MacLaren, a Hudson firefighter and a former DFS employee. She wrote and delivered the poem below as part of her speech at graduation ceremonies.

Eleven weeks may come and go,
days pass, not much to see.

But in this room sit 43, that will
surely disagree.

From 24 different towns, we
started out alone,

And in this time we have become a
family with a home.

But if this time's so short, how
could there stand a chance,

To earn the trust of our peers in
any circumstance?

In classroom 111, we gathered on
day one,

And from that moment we all
knew, our journey had begun.

Roll call would start the day, and
we can all conquer,

We'd all begin to chuckle, when
hearing "Milne sir".

Running to the lockers, we'd
scurry to get changed,

Whether evens turn or odds, it was
all prearranged.



Photo by: Allan Jung, Metrowest Daily News

The warm up would begin, while
staying in format,

There was no way that we would
miss observing the mad-cat.

It's now off to the races, we would
line up to run,

It is quite clear that we all did not
find it very fun.

But we all gave our best, and tried
to remain strong,

With bellows of encouragement,
we never had it wrong.

Cadence began with Darlings,
surprise little chant,

We would respond in laughter,
behind a puff and a pant.

Then Jerry would take over,
Whiskey Jack always stood,

Finally by week 11, we mastered
"Johnny Be Good."

Through tired aching breaths, a
voice from back would say,

Marfongelli's favorite words, this is
the best part of the day.

The Cool Guy hollered loudly,
those words 'who are we?',

With much pride and compassion,
we'd respond with 143.

Count Cadence Count, brought us
back into the station,

Tewksbury's "Outstanding",
would echo through the nation.

After our cool down, we'd all
scramble for showers,

A lecture closely followed, what
seemed like endless hours.

Lectures on hydraulics, fire nature,
search & rescue,

Building construction, ventilation,
and that is just a few.

Finally lunch would come, enough
time to taste our food,

Then off we'd go out in the yard,
to get into the mood.

We'd walk to evolutions, alert and
never slumber,

Because we valued our lives, in
hand we'd have our number.

All watching very closely, three
times is all we'd see it,

Before we'd be put to the test, not
wanting a demerit.

Tests on raising ladders, or how to
make a knot,

You'd think it would be easy, but
FOR MOST we took the shot.

The pressure of getting graded,
taking one or taking five,

Are hits we took so we could learn
just how to stay alive.

Hose 1, hose 2 and 3, when would the grading cease.

We wanted to fight fires, that's where we would have peace.

But through all of this grading, there really was a plan,

We finally understood it when the phase fires began.

In that darkened building, our skills all came together.

From running pumps and humping hose in any kind of weather.

Instilled in our minds, the importance of our gear,

Wear hoods and gloves and collars up, your life is the most dear.

Safety is always first, be sure to sound the floor,

Pull back your glove and check for heat before entering the door.

The attack line is in place, the building's getting hotter,

You're face to face with raging flames, while the driver's getting water.

The rescue team is searching, down a dark and smoky hall,

Conditions have turned so severe, it's time for them to crawl.

But knowing that inside, a child hides in fear,

We'll find our way to those sad cries and wipe away her tears.

The ladder truck arrives, and ready for the climb,

With tools in hand, up to the roof, to ventilate in time.

The fire has been conquered, overhaul is our next chore,

The best part is when, in the end, we're all accounted for.

Our job is a big risk, each day is not the same,

We do the job with helping hands, not for fortune or for fame.

Free Smoke Alarm Project

The Department of Public Health (DPH) was always seen preventing fire and burn injuries as part of their mission. They recently completed a three-year project on home smoke alarms in conjunction with Brockton Fire Chief Kenneth Galligan, Lynn Fire Chief Curtis Numberg, and Ret. Lowell Fire Chief Andrew LaCourse. This project is making 4,000 smoke alarms available to any local fire department who teams up with a community agency, or to any community agency that teams up with a local fire department. With the increase in fire deaths in 2000, we are particularly excited about this joint project.

So far, 30 communities have submitted applications for the 4,000 free smoke alarms available from the Department of Public Health program. The requests total more than 6,000. Over 2,300 smoke alarms have been distributed to local

fire departments and community groups so far. The 10-year lithium battery smoke alarms were purchased from Home Depot which has been contributing to this project by shipping the smoke alarms directly to

communities. They have had to order more smoke alarms in order to fill all the requests, which may delay shipment to some people for a week or so, but at least the detectors won't

be sitting on the shelves.

The applications show fire departments forging interesting and encouraging partnerships with community groups ranging from the senior centers to healthy homes programs to Department of Social Services' foster parents. Public fire educators know they cannot solve the fire problem themselves, and the more people they involve in fire safety education, the more successful we'll all be. ♦



It's the basics that we've learned, we now have a foundation,

To use in our long careers while we are in the station.

So in 10 years from now, wherever we may be,

A familiar voice may holler, those words "who are we?",

And in response the pride inside will bring those words to say,

Remembering this very time, "class 143" – all the way.

Judith A. MacLaren, Recruit Class #143 ♦

Fallen Firefighters Memorial Sunday - June 10

The second Sunday in June is Fallen Firefighters' Memorial Sunday. Communities throughout the commonwealth will be holding memorial events on June 10. ♦

MFIRS CORNER

Legal Issues

The following is excerpted from a legal opinion from the general counsel at DFS written in September, 2000.

Reporting Requirements

M.G.L. c.148 s.2 mandates reporting by the head of the fire department of a city, town, or fire district. The statute requires the immediate reporting of fires or explosions of suspicious origin, where a violation of law has occurred or when the cause is undetermined. The second category for reporting of fires and explosions is, all others where

there is a loss are reportable within 48 hours (not including Saturday and Sunday) in writing to the Marshal. Reports under 148 s.2 are to be on forms furnished by the Department of Fire Services and shall contain: a statement of facts relating to the cause and origin of the fire or explosion; the extent of the damage; the insurance on the damaged property and; such other information as may be required. Finally, the statute requires the Marshal to keep in his office a record of all fires and explosions, with the results of such investigations. These records are open to public inspection.

Public Records

All fire incident reports are public records. The general counsel's opinion states that the casualty reports are also public records, but that they may be generally speaking exempted from public disclosure under M.G.L. c.4 s.7 cl.26 (c) which states "personnel and medical fires or information, also any other materials or data relative to a specifically named individual the disclosure of which may constitute and unwarranted invasion of personal privacy." ♦

Version 5 Software Vendors

The Fire Data Unit will work with any vendor that a fire department selects to ensure the ability to successfully submit MFIRS data electronically. For status of vendor certification by the U.S. Fire Administration please check their website at www.fema.gov.

The following is a list of incident reporting software vendors known by the Fire Data Unit to have

Massachusetts fire department customers and the status of their submission of test fires for electronic MFIRS V5 reporting. So far, nine (9) software vendors have received approval for electronic submission of MFIRS version 5 data. Several more are in the middle of the process. One of the things a fire department should consider is whether or not a software vendor has received certification from

the U.S. Fire Administration. The USFA conducts a much more thorough test of the software than we do. A vendor who participates in the USFA certification process also agrees to stay current with any changes the USFA makes. At the moment, the U.S. Fire Administration is making changes every January and every July. ♦

VENDOR	Submitted Test		USFA Certified?
	File to OSFM?	Mass Approved?	
FirePoint	✓	✓	✓
Firehouse	✓	✓	✓
Vernon	✓	✓	✓
Pamet	✓	✓	
DM Data	✓	✓	✓
KeyinfoSys	✓	✓	
FirePrograms	✓	✓	✓
QED	✓	✓	✓
IMC	✓	✓	

Version 5 Coding for Chimney Fires

Chimney fires that stay contained to the chimney are easily coded as Incident Type 114 and as soon as you complete the Basic module (or form), you're all done.

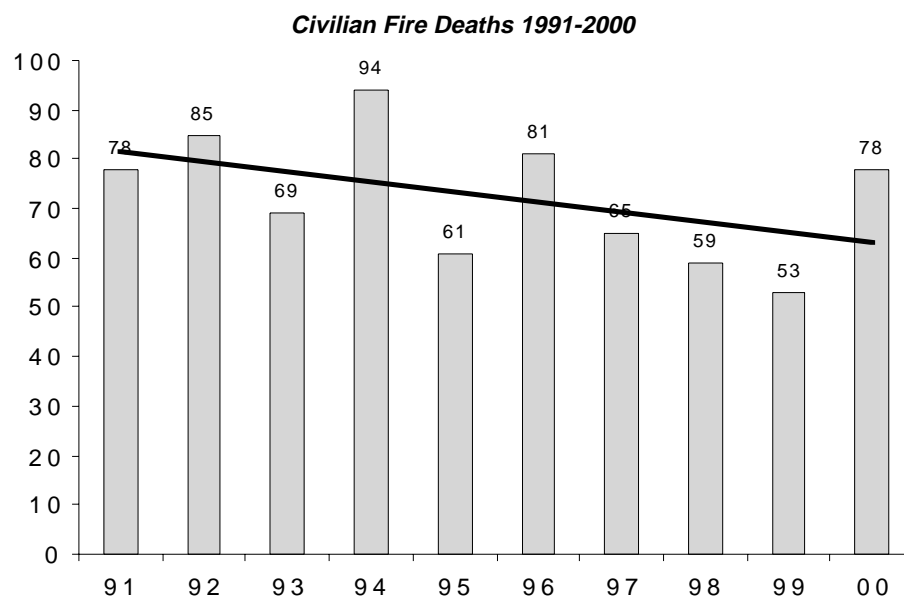
Chimney fires that extend into the wall are a little more complicated. The Incident Type will most likely be 111 and will require the basic, the fire and the structure fire modules (or forms). In version 4 we used code 57- chimney for Area of Origin. But in version 5, there is no area of origin code for chimney. Our research into this revealed that for chimney fires that extend out of the chimney, the area of origin is where it gets into the rest of the building. Did the extension start on the roof? In the bedroom? In the wall structure? In essence, what was the area of origin when it stopped being a contained fire? When you move onto Item First Ignited, be consistent. What was the item first ignited when it left the confines of the chimney? Equipment involved in Ignition Codes offer you a variety of fireplace, woodstove and chimney codes in the 120-127 range. The Equipment Power Source should be from solid fuels such as 41- wood, paper; and we hope the equipment is stationary, not portable. ♦

Fire Deaths Jump in 2000 from Record Low in 1999

Fire Deaths Continue Decade-Long Downward Trend

In 2000, there were 78 civilian fire deaths in Massachusetts, a 47% increase over the all-time record low of 53 fire deaths set in 1999. The 78 deaths, however, do not change the overall decline in fire deaths that has continued throughout the decade.

Fifty-eight (58) fatal fires killed 78 civilians - 39 men, 27 women and 12 children - in 2000. One quarter of the fatal fire victims was an older adult (over 65). Nearly 70% of the civilian fire victims died in their homes. Smoking materials was the #1 cause of residential fire deaths. Smoking caused 17, or nearly 40% of residential structure fire deaths. ♦



Source: Fire Data and Public Education Unit, Office of the State Fire Marshal

Heart Attack Again Cited for Many On-duty Firefighter Fatalities in 2000

Quincy, MA, May 14, 2001 – Heart attacks continued to be the leading cause of fatal on-duty injury to U.S. firefighters (40 deaths, or 39% of all firefighter deaths) last year, according to a report just released from the nonprofit NFPA (National Fire Protection Association). There were 102 on-duty firefighter deaths, a decrease of 10 deaths from 1999.

Leading causes: Heart attack is typically the leading cause of death and generally accounts for roughly half of all on-duty deaths. On-duty heart attack deaths are usually attributed to overexertion or stress.

The stress-related deaths in 2000 also included two due to strokes, one to an aneurysm and one from a seizure. Last year, 11 of the 40 who suffered fatal heart attacks were known to have had prior heart problems, including heart attacks or bypass surgery.

Other major causes: Last year, 21 firefighters were killed in motor vehicle crashes, almost half of which occurred while the victims were responding to emergency calls. Thirteen firefighters died of smoke inhalation or burns at fires. Twelve died of traumatic injuries resulting from falls or from being struck by vehicles or other objects. In

2000, three firefighters were murdered while on duty.

Affiliation of firefighters who died: 57 were volunteer firefighters, 28 were career firefighters, six were employees of state forestry agencies, three were employees of federal forestry agencies, three were contractors to federal or state forestry agencies, two were members of a state inmate forestry crew, one was a civilian employee of the military, one was a military firefighter, and one was a member of an industrial fire department.

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FIRE AND LIFE SAFETY EDUCATION



S.A.F.E. Young Heroes Event Awards *Continued from page 1*

Nantucket and Hyannis, Saugus, Shelburne Falls, Taunton, Uxbridge, Wakefield, Wenham, and Westford were honored.

The S.A.F.E. Program is a state initiative to fund grants to local fire departments to conduct fire and life safety education in grades K-12. The mission is to enable students to recognize the dangers of fire, and more specifically, the fire hazards tobacco products pose. A total of 240 fire departments collaborate with local school and health departments in the S.A.F.E. Program which is in its sixth year.

More than 120 "young heroes" from the S.A.F.E. Program have been brought to the attention of the State

Fire Marshal. "These children teach us that fire and life safety education works," said Public Safety Secretary Jane Perlov. "Children who remind caregivers to maintain smoke alarms, to pick a special meeting place and to keep matches and lighters out of reach of younger children, help to keep families safe from fire," added Perlov.

"We are proud of the firefighters, school teachers and parents who are helping us to raise a fire safe generation of children," said State Fire Marshal Stephen D. Coan. "When children learn what to do in an emergency, they are able to stay calm, react appropriately and save themselves and others."

The event was well attended by members of the Legislature, members

of the media (television, radio and print) and members of the fire service. Three fire departments helped us to showcase some of the innovative methods of fire education: Cumington brought Sparky the robotic dog in his fire truck; Nahant played fire safety jeopardy with guests, and Malden sent Hooligan the fire and life safety clown. Papa Gino's Restaurants generously provided a delicious pizza lunch for all those who attended. Jason Henske, a student from the Hallmark Photography School donated his services and film.

By all accounts, the children and their families were delighted. These youngsters certainly prove that fire and life safety education works. ♦

Lesson Plan for Teaching Mentally Challenged Adults

Gardner S.A.F.E. Program

Target Audience: Mentally challenged adults who live in supervised group or foster homes. These same individuals also work in supervised work units such as college kitchens and manual assembly lines.

Objective: To demonstrate with the use of the Fire Safety House that although a fire threat may not be obviously visible (in the room where people are at the moment) it may in fact exist somewhere else in the structure.

Goal: To have the target audience react properly to fire and smoke alarms and to execute an escape plan even when a life safety threat is not clearly perceived by these individuals.

Lesson: Groups of 4-6 of the target audience, along with staff, enter the living room area of the fire safety house and receive a brief lecture on executing a fire escape plan. They are constantly reassured that if anything were to happen in the fire safety house, they would not be in any danger, but should react appropriately to the situations as they presented themselves.

Smoke is generated in the bedroom side of the fire safety house and the smoke alarms are activated. (No strobes are used due to the high incidence of seizures by several of the individuals.)

Students were not prompted except to say that they should try to leave first through the bedroom area. After feeling the door and realizing it was cool, they were to slowly open the

door, at which time smoke would be quite visible and a second away out, the front door would be their means of egress.

Results: This approach clearly proved to the individuals that when the alarm sounds that there is no visible or perceived threat, it is still vitally important for them to execute their fire escape plan. Many of their work sties and homes are quite large and during their routine fire drills they are in a safe area where there are no visible threats. This demonstration proved that although danger may not be obvious, it can and does exist and we must all react accordingly. For more information contact Brian Smith at (978) 630-4051. ♦

Tip for Teaching Seniors

Deputy Carl Eckborg of Gloucester reports great success in using the film, *Get Out and Stay Alive*, originally designed for college campus fire safety education, with older adults. This film, and the film *Ready to Respond* for campus fire safety officials, are available for loan from the Resource Library in the Public Education Unit.

Senior Fire Safety Resources

United States Fire Administration

Publications Center
United States Fire Administration
Website: www.usfa.fema.gov
16825 South Seton Avenue
Emmitsburg, MD 21727
(800) 238-3358

Let's Retire Fire: A Fire Safety Program for Older Americans

This 15-page campaign kit contains information to assist in the develop-

ment of a public education program targeted to older Americans. This kit contains ideas, talking points, a wall hanger, checklist, and tips for working with the media.

Consumer Product Safety Commission

Publication Request
Office of Information and Public Affairs
U.S. Consumer Product Safety Commission
Washington, DC 20207
Website: www.cpsc.gov

Safety for Older Consumers: Home Safety Checklist — 701 (S)

This 37-page booklet gives tips on home safety in a checklist format. This program may be presented in whole or as individual programs and is available in English & Spanish at no cost.

Fire Safety Checklist for Older Consumers — 702 (S)

This 12-page booklet offers tips to help protect older Americans and their families from fire. This booklet is a

good handout for seniors and is available in English & Spanish at no cost.

National Fire Protection Association

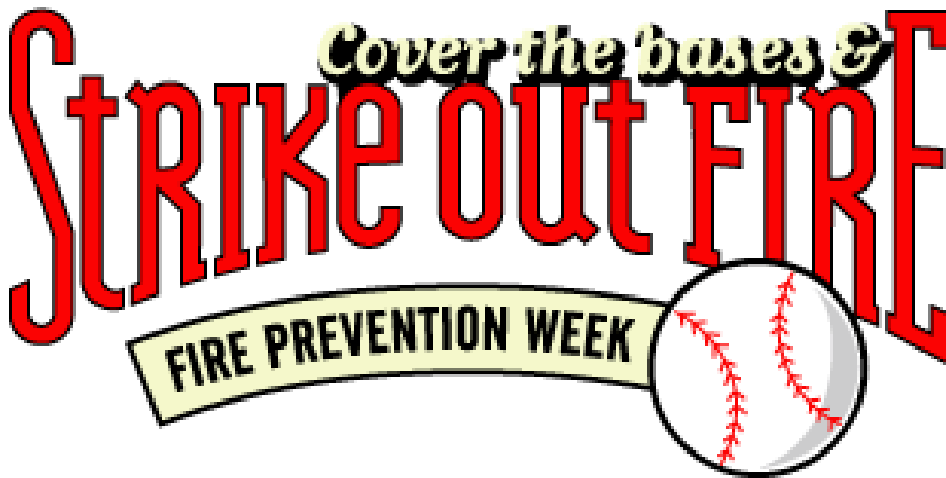
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02269-9101
(800) 344-3555
Website: www.nfpa.org

Remembering When: An Older Adults Fire and Fall Prevention Program

This program contains everything you will need to conduct a comprehensive fire and fall prevention program for older adults in your community. *Remembering When* uses group presentations, home visits, and installation and intervention approaches to deliver 16 fire and fall prevention messages. The program is full of reproducible handouts, pictures, graphs and a fun trivia game for older adults. Cost: \$50.00.

Continued on page 12

NFPA Announces Theme for Fire Prevention Week



The National Fire Protection Association (NFPA) announced a baseball theme for fire prevention week (October 7-12, 2001) this year, "Cover the Bases & Strike Out Fire." They will be using a baseball diamond as a visual clue to help families "cover the bases" to "strike out" preventable home fires. Kitchen safety will be at first base,

heating safety at second and electrical safety at third. Home plate will serve as a reminder to youngsters to test smoke alarms and practice escape plans at home. Former Red Sox pitcher Dennis Eckersley will be the official spokesperson for the NFPA's FPW campaign. For more information contact the NFPA's website at www.nfpa.org. ♦

Summer Fire Safety Program

A group of SAFE educators from across the state are currently finalizing plans to hold a summer fire safety program. The program is being run by *Friends of SAFE*, a grassroots organization made up of interested fire personnel from within the SAFE community. A mailing was sent to 106 communities across the state, asking for their involvement in the program itself. It will be similar to the programs run by DFS in the past. There will be five learning stations for the children to participate in while learning valuable lessons in fire safety. The day will end with the children taking part in a muster and closing ceremony. The day will begin at 9:00 a.m. and end at 3:00 p.m. It will be the responsibility of the individual departments to transport their children. It is being held on the grounds of the former Fort Devens and is being sponsored by Devens Fire Department and Project MassDevelopment. Numerous sponsors are donating services, food, and any items necessary to make this a successful and fun day for the children. Communities will be allowed to send two children. Any community that has not received a mailing and is willing to help out for the day will also be able to bring two children should contact: Friends of SAFE, P.O. Box 362, Winchendon, MA. 01475 or send an e-mail to FriendsofSAFE@aol.com. You may also contact Heidi Lafrennie @ 978-297-2081 with any questions. ♦

Senior Fire Safety Resources *continued from page 11*

A FREE COPY for every fire department is available from the Public Education Unit.

Senior Fire Safety with Jonathan Winters Video

In this award-winning video, comedian Jonathan Winters, a "senior" himself, focuses on the special fire safety considerations of older adults. An 18 minute video and instructor's guide is included. Cost: \$383.75

Fire Safety Tips for Older Adults Brochure

A colorful brochure, which presents clear guidelines on how to prevent and survive home fires. Brochures are packaged in lots of 100. Cost: \$19.00

Syndistar

Syndistar, Inc.

5801 River Road
New Orleans, LA 70123-5106
Website: www.syndistar.com
(800) 841-9532

Fire Safety for Senior Citizens

This 10-minute video provides the elderly with the facts they need to protect themselves from fire. Includes tips on a variety of fire safety topics for senior citizens. Cost: \$50.00

Practice for Life: Safe Escape for Senior Citizens and the Disabled

This 15 minute video stresses planning, practice, and prevention, and is a must for the elderly and all health care personnel who work with the elderly. Cost: \$195.00

Practice for Life: Safe Escape for Senior Citizens and the Disabled

Pamphlet to accompany video. Cost: Unknown. ♦



Use of Special Effects in School Plays and Productions

A young woman working for a high school play production has been injured while handling special effects, receiving second degree burns on her hands and arms. The special effects device was homemade. The flash powder used in the device was apparently ordered through the Internet, and neither the person who was injured nor the person she was working with, were properly licensed to handle special effects. The devices used in this incident were extremely crude and the individuals using them clearly did not have appropriate knowledge of how special effects should be handled. All of the components of the failed device were easily purchased at the local hardware store or novelty shop, or over the Internet. It is further understood that these individuals, who are not

students, have provided this “service” to other schools, including colleges, in the commonwealth for a number of years now.

Because of the obvious hazards of untrained and unlicensed individuals working with homemade special effects devices, the Office of the State Fire Marshal is alerting you to the fact that any type of special effect has to be conducted by properly licensed and permitted individuals. High school and college officials should take a close look at the plans for the production. The fire department should be asked to review any type of plan for the use of special effects, regardless of how insignificant the effect may seem, to determine permitting requirements.

Fire officials are asked to continue to

reach out to schools in their communities to make them aware of such requirements. The Office of the State Fire Marshal has received a call already from a school as a result of a recent Advisory to the Fire Chiefs on this matter. Officials at this particular school indicated they have been using special effects for sometime, but were unaware of the regulatory requirements for such materials.

Further assistance is always available through the Office of the State Fire Marshal. Feel free to call the Code Compliance and Enforcement Unit or Technical Services at either (978) 567-3300 or in Western Mass. (413) 587-3181. ♦

Fireworks User's Certificate Required After June 1, 2001

After June 1, 2001 a Fireworks/Special Effects User's Certificate will be required for the issuance of a permit for either display fireworks or special effects. The Office of the State Fire Marshal has been processing applications and will be issuing certificates at the end of May with an effective date of June 1, 2001. The certificates to be issued will all be originals. Photocopies of certificates should not be accepted under **any** circumstances. The certificates themselves will be distinct in appearance and will include the name and address of the holder of the certificate, effective and expiration dates, certificate number and registration number. This user's certificate has to be in the hands of the fire department prior to the show.

The basis for issuing multiple original certificates is to accommodate the

practice of mailing permit applications to the fire departments. If an application and certificate has been mailed to the fire department, then the department should not be expected to return the original certificate to the applicant. Should the applicant present the certificate to the department in person, then the department may make a copy of the certificate for their files and return the original to the company. Should a fireworks company have more than one show in the same town, but on different dates, then one original certificate may be allowed for more than one show date, as long as the show dates are within the valid period of the certificate. All other permitting procedures remain the same.

A list of active user's certificates will be distributed to each department at the beginning of June 2001. Should there be any question regarding the validity

of a certificate, feel free to call the Office of the State Fire Marshal for verification. If there is any question as to whether the individual presenting the certificate is an employee of the company named on the certificate, a call should be made to that company for verification. While it is not expected that there will be any fraudulent use of this certificate, it is a new requirement for the fireworks industry and the potential exists for mishandling due to confusion over the new requirement.

Further assistance is always available through the Office of the State Fire Marshal. Feel free to call the Code Compliance and Enforcement Unit or Technical Services at either (978) 567-3300 or in Western Mass. (413) 587-3181. ♦

Explosives and Fireworks Certificates and License Forms to be Standardized

Starting with the issuance of the Fireworks User's Certificate in June, all other certificates and licenses issued by the Office of the State Fire Marshal will become standardized on a printed form. The certificates and licenses that are to be converted include: Fireworks User's Certificate,

Explosives User's Certificate, License to Sell Black/Smokeless Powder and License to Sell Explosives.

The applications for these certificates and licenses will also be converted to the standard application format that is currently used for Certificates of

Competency and the Explosives User's Certificate. The new Fireworks User's Certificate to be issued June 1, 2001 will be the first certificate in the new format. All other certificates and licenses will be converted when normal renewals are processed. ♦



The Commonwealth of Massachusetts

EXPLOSIVES USER CERTIFICATE

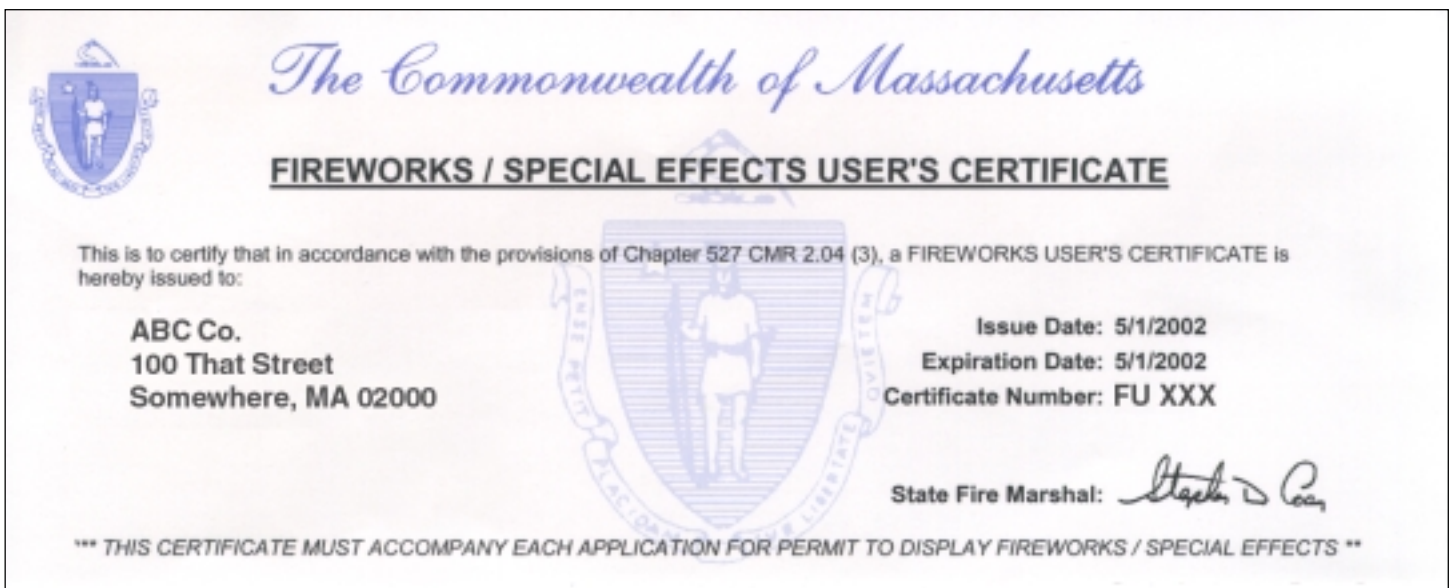
This is to certify that in accordance with the provisions of Chapter 527 CMR 13.04 (10), an EXPLOSIVES USER CERTIFICATE is hereby issued to:

**ABC Co.
100 That Street
Somewhere, MA 02000**

Issue Date: 4/15/2002
Expiration Date: 4/15/2002
Certificate Number: EU XXX

State Fire Marshal: *Stephen D. Ryan*

*** THIS CERTIFICATE MUST ACCOMPANY EACH APPLICATION FOR PERMIT TO BLAST ***



The Commonwealth of Massachusetts

FIREWORKS / SPECIAL EFFECTS USER'S CERTIFICATE

This is to certify that in accordance with the provisions of Chapter 527 CMR 2.04 (3), a FIREWORKS USER'S CERTIFICATE is hereby issued to:

**ABC Co.
100 That Street
Somewhere, MA 02000**

Issue Date: 5/1/2002
Expiration Date: 5/1/2002
Certificate Number: FU XXX

State Fire Marshal: *Stephen D. Ryan*

*** THIS CERTIFICATE MUST ACCOMPANY EACH APPLICATION FOR PERMIT TO DISPLAY FIREWORKS / SPECIAL EFFECTS **

Status Report of Compliance/Enforcement Actions

The following is a status report of compliance and enforcement actions taken by the Office of the State Fire Marshal against individuals or companies for violations of MGL Chap. 148 and 527 CMR. The time frame for this report covers events during late 2000 and early 2001. The

status of the action is provided and notation is made regarding reinstatement. While other actions may be pending, only those individuals or companies who have had hearings with decisions rendered will be documented in this space.

Should there be any question regarding

the status of any license or certificate please call the Office of the State Fire Marshal at any time for verification. The Code Compliance and Enforcement Unit or Technical Services can be reached at either (978) 567-3300 or in Western Mass. (413) 587-3181. ♦

Compliance/Enforcement Actions By The Department of Fire Services

Name	License #	Action	Effective Date
Blasting Licenses			
Vernon DeMoranville	BL 002550	Suspended pending retest	
Ray Lizotte	BL 003943	Revoked	
Kevin MacDonald	BL 003946	Suspended Five Years	Effective 4/9/01
Larry Laford	BL 003261	Suspended 6 months	License Reinstated 6/01
Patrick O'Conner	BL 003496	Suspended 2 years	Effective 12/14/00
Don Yebba	BL 003462	Suspension Served - License Reinstated	
Kevin M. Falvey	BL 003847	Suspension Served - License Reinstated	
Explosives User's Certificate			
Exquisite Craft Development Corp.	EU 329	Suspended Five Years	Effective 4/9/01
Granite Rock Drilling and Blasting	EU 213	Revoked	
Hemphill Drilling & Blasting	EU 140	Suspended Six Months	Effective 6/15/01

Heart Attack again cited in 2000 *Continued from page 9*

Type of duty when fatality occurred: 38% of the firefighter deaths occurred on the fireground, 24% occurred while responding to or returning from alarms, followed by other on-duty responsibilities (18%), training (14%), and non-fire emergencies (7%).

Fireground deaths: Of the 39 fireground deaths, 14 were due to heart attacks, eight to asphyxiation, seven to internal trauma, five to burns, two to electrocutions, two to pneumonia following traumatic injuries, and one to stroke.

Ages: A quarter of the career firefighters who died were between the ages of

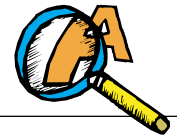
41-45. More than a third of the volunteer firefighters who died were over the age of 60.

Arson, false alarms, assaults: Nine firefighters died in connection with arson fires. Six firefighters died as a result of false alarms last year. Also, three firefighters were fatally assaulted and another was accidentally shot during SWAT training.

"Cardiovascular illnesses continue to account for such a large proportion of firefighters deaths annually, and this needs to be addressed," said Rita Fahy, NFPA's manager of fire databases and systems and co-author of the report.

"Increased attention to incident management and accountability systems is essential if we are to continue to reduce the death toll at fire incidents."

George D. Miller, NFPA's president and CEO, said, "With our longstanding commitment to firefighter and public safety, NFPA continues to work with firefighters to help identify and correct trends relating to fatalities. So much more, though, has to be learned about why cardiovascular illness is cited so often for these deaths and how we can all work toward eliminating this as a cause." ♦



South Team

Arson Watch Reward

On May 18, 2001, the Massachusetts Property Insurance Underwriting Association presented checks to two people from the Arson Watch Reward Program. Two witnesses in a January, 1999 Marshfield arson case received \$1,000 each. The two men saw a man come out the front door of his cape-style house moments before smoke billowed out of the second floor windows. Sgt. Kevin McMahon, South Team Leader, investigated the case along with the Marshfield Fire and Police Departments. Sgt. McMahon said these two witnesses testified before the grand jury, at pretrial motions and the trial of William Baker who was convicted of arson and sentenced to 2-4 years at MCI Cedar Junction.

North Team

On May 17, 2001 two individuals already being held at the Middleton House of Correction were charged with arson of dwelling, breaking and entering with intent to commit a felony, and, malicious destruction of property in excess of \$250. Earlier in the week, North Team investigators developed information from a witness

about an April 16, 2001 Saugus arson fire. The dwelling had recently been ordered closed by the Board of Health because the owner-occupant had suffered from extreme hoarding behavior, and the home was crammed with many things, making it uninhabitable. Troopers Horgan, Bossi and Silva and Saugus Detective Evlog were able to obtain confessions from the two youths using the information developed from the witness.

Haverhill

On May 5, 2001, Virginia Maldonado was charged with setting a fire in her own Haverhill apartment. Her ex-boyfriend, against whom she had an active restraining order, was due to be released from the Middleton House of Correction the next day. In an attempt to keep her ex-boyfriend in jail, the woman called Haverhill Police and told them she had been threatened by telephone that she was going to be burned out of her house. When the police responded, she told them that she believed that the threat was being initiated by her ex-boyfriend through a messenger and asked that he be charged with violating the restraining order. Haverhill Police advised her that they did not have probable cause to do so. About an hour and a half later, at

11 p.m., the Haverhill Fire and Police Departments responded to the same address for a fire inside Ms. Maldonado's apartment. The circumstances did not add up and the focus of the investigation soon turned to Ms. Maldonado herself. During a subsequent interview by Trooper Paul Horgan and Haverhill Fire Deputy Edward Chief Syvinski, Ms. Maldonado admitted that she had started the fire herself in an attempt to keep the ex-boyfriend behind bars longer. ♦

The **DFS Quarterly** is published every March, June, September, and December. If you have some newsworthy information to share with the fire service, you are welcome to submit articles to: Jennifer Mieth, Editor, DFS Quarterly, Dept. of Fire Services, P.O. Box 1025, Stow, MA 01775. (978) 567-3381 or Internet Address: Jennifer.Mieth@state.ma.us

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